

**Fw: Email 2 of 3 - Encana Oil and Gas**

Linda Bowling to: Douglas Minter, Steven Pratt

10/11/2012 10:42 AM

From: Linda Bowling/R8/USEPA/US

To:

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FYI

Linda M. Bowling  
US Environmental Protection Agency, Region 8  
Underground Injection Control Unit  
1595 Wynkoop Street  
Mailcode: 8P-W-UIC  
Denver, CO 80202  
Phone: 303-312-6254  
Fax: 303-312-6741

----- Forwarded by Linda Bowling/R8/USEPA/US on 10/11/2012 10:41 AM -----

From: Linda Bowling/R8/USEPA/US  
To: Lucita Chin/R8/USEPA/US@EPA  
Cc: Douglas Minter/R8/USEPA/US@EPA  
Date: 09/25/2012 04:42 PM  
Subject: Email 2 of 3

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From: Linda Bowling/R8/USEPA/US  
To: "Janie Nelson" <janie.nelson@wyo.gov>  
Cc: Douglas Minter/R8/USEPA/US@EPA, Steven Pratt/R8/USEPA/US@EPA  
Date: 08/22/2012 01:16 PM  
Subject: Fw: Re: Response to Janie Nelson's question

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Janie here's our response to your question. Let us know if you would like to discuss this further.

Janie question: Are there any EPA regulations which restrict injection of fluids through a UIC disposal well into a formation with water quality less than 3,000 mg/l, total dissolved solids?

EPA regulations prohibit the injection of fluid via a Class I, II, or III well into *any* USDW regardless of the TDS. See 40 CFR 144.12. In general, we tend to think of USDWs as less than 10,000 mg/l, TDS, but it can be more if someone is using it as drinking water. See 40 CFR 144.3 (definition of USDW). The USDW definition

is broad, so EPA also promulgated the aquifer exemption process in order to allow for injection into aquifers that really would not be used as drinking water. So, in order to be able to inject into a Class I, II or III well, the receiving aquifer must fall outside the definition of a USDW or get an aquifer exemption under the 146.4 criteria.

The AE criterion under 146.4 (c) is only available for those receiving USDWs that are greater than 3,000 mg/l, TDS and less than 10,000 and not reasonably expected to supply a PWS. Therefore, that particular criterion cannot be used to justify an AE for water less than 3,000 mg/l, TDS. The WOGCC and the operator will need to consider a different one.

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